

## § 25.212

full transponder services if the maximum power into the antenna does not exceed 500 watts (27 dBW).

[58 FR 13421, Mar. 11, 1993, as amended at 61 FR 9952, Mar. 12, 1996; 62 FR 5931, Feb. 10, 1997]

## § 25.212 Narrowband transmissions in the Fixed-Satellite Service.

(a) Except as otherwise provided by this part, criteria for unacceptable levels of interference caused by other satellite networks shall be established on the basis of nominal operating conditions and with the objective of minimizing orbital separations between satellites.

(b) Emissions with an occupied bandwidth of less than 2 MHz are not protected from interference from wider bandwidth transmissions if the r.f. carrier frequency of the narrowband signal is within  $\pm 1$  MHz of one of the frequencies specified in § 25.211(a).

(c) In the 14 GHz band, an earth station with an equivalent diameter of 1.2 meters or greater may be routinely licensed for transmission of narrowband analog services with bandwidths up to 200 kHz if the maximum input power density into the antenna does not exceed  $-8$  dBW/4 kHz and the maximum transmitted satellite carrier EIRP density does not exceed 13 dBW/4 kHz, and for transmission of narrowband and/or wideband digital services, if the maximum input power density into the antenna does not exceed  $-14$  dBW/4 kHz and the maximum transmitted satellite carrier EIRP density does not exceed  $+6.0$  dBW/4 kHz.

(d) In the 6 GHz band, an earth station with an equivalent diameter of 4.5 meters or greater may be routinely licensed for transmission of SCPC services if the maximum power densities into the antenna do not exceed  $+0.5$  dBW/4 kHz for analog SCPC carriers with bandwidths up to 200 kHz, and do not exceed  $-2.7$  dBW/4 kHz for narrow and/or wideband digital SCPC carriers.

[58 FR 13421, Mar. 11, 1993, as amended at 62 FR 5931, Feb. 10, 1997; 62 FR 51378, Oct. 1, 1997]

## 47 CFR Ch. I (10–1–00 Edition)

## § 25.213 Inter-Service coordination requirements for the 1.6/2.4 GHz mobile-satellite service.

(a) Protection of the radio astronomy service in the 1610.6–1613.8 MHz band against interference from 1.6/2.4 GHz Mobile-Satellite Service systems.

(1) *Protection zones.* All 1.6/2.4 GHz Mobile Satellite Service systems shall be capable of determining the position of the user transceivers accessing the space segment through either internal radiodetermination calculations or external sources such as LORAN-C or the Global Positioning System. During periods of radio astronomy observations, land mobile earth stations shall not operate when located within geographic protection zones defined by the radio observatory coordinates and separation distances as follows:

(i) In the band 1610.6–1613.8 MHz, within a 160 km radius of the following radio astronomy sites:

Observatory	Latitude (DMS)	Longitude (DMS)
Arecibo, PR .....	18 20 46	66 45 11
Green Bank Telescope, WV .....	38 25 59	79 50 24
	38 26 09	79 49 42
Very Large Array, NM .....	34 04 43	107 37 04
Owens Valley, CA .....	37 13 54	118 17 36
Ohio State, OH .....	40 15 06	83 02 54

(ii) In the band 1610.6–1613.8 MHz, within a 50 km radius of the following sites:

Observatory	Latitude (DMS)	Longitude (DMS)
Pile Town, NM .....	34 18 04	108 07 07
Los Alamos, NM .....	35 46 30	106 14 42
Kitt Peak, AZ .....	31 57 22	111 36 42
Ft. Davis, TX .....	30 38 06	103 56 39
N. Liberty, IA .....	41 46 17	91 34 26
Brewster, WA .....	48 07 53	119 40 55
Owens Valley, CA .....	37 13 54	118 16 34
St. Croix, VI .....	17 45 31	64 35 03
Mauna Kea, HI .....	19 48 16	155 27 29
Hancock, NH .....	42 56 01	71 59 12

(iii) Out-of-band emissions of a mobile earth station licensed to operate within the 1610.0–1626.5 MHz band shall be attenuated so that the power flux density it produces in the 1610.6–1613.8 MHz band at any radio astronomy site listed in paragraph (a)(1) (i) or (ii) of this section shall not exceed the emissions of a mobile earth station operating within the 1610.6–1613.8 MHz band